

# Designing the Page with CSS

---



**Mario Macari**  
DEVELOPER & PROFESSOR  
[www.mariomacari.com](http://www.mariomacari.com)



# Font Weight

How thick or thin glyphs in fonts should be displayed.



Gotham Book

**Gotham Medium**

Gotham Light

***Gotham Medium Italic***

*Gotham Book Italic*

*Gotham Light Italic*

**Gotham Bold**

***Gotham Bold Italic***

## Font Weight

How thick or thin glyphs in fonts  
should be displayed.



# Cascading Style Sheets (CSS)

Cascading Style Sheets or CSS is a style sheet language used for describing the graphic design of an HTML page.



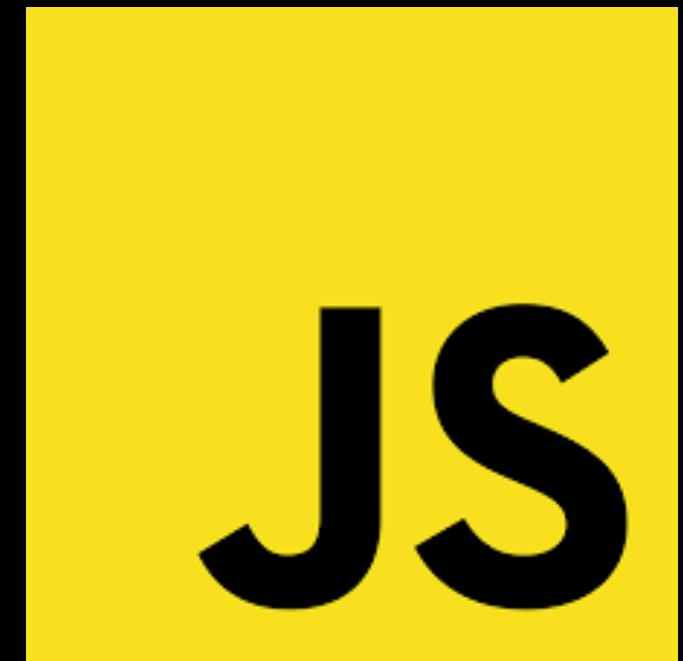




HTML5



CSS3



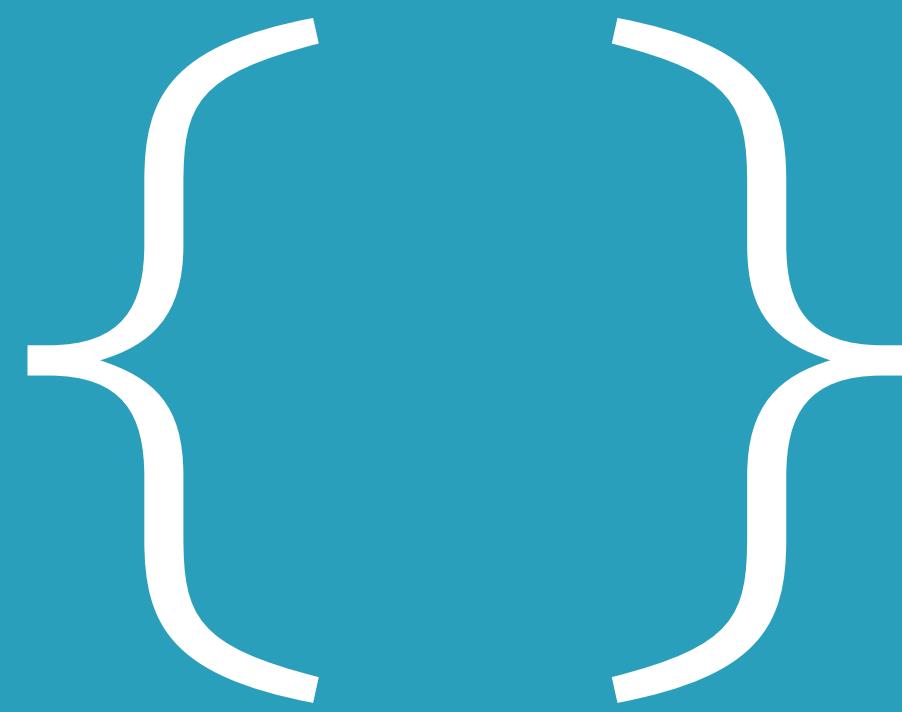
Javascript

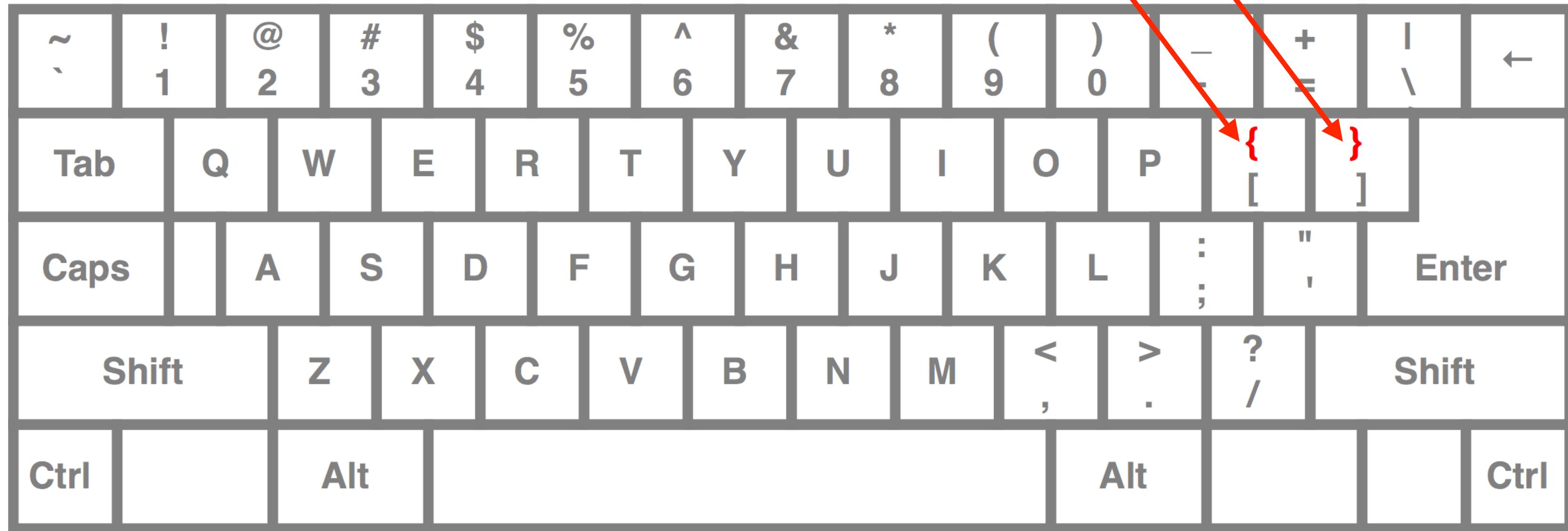




**JS**







## Element Selector

```
body{  
    A large black bracket surrounds the entire word "body" and its opening brace. A second, smaller black bracket surrounds the closing brace and the line of code below it.
```

## Declaration Block



```
1 ▼ body{  
2   color:#555;  
3 }
```

Follow these rules



1 ▼ body{

2     color: #555;

3 }

Property

Value

End of the command



```
body{color:red; font-family:Arial; font-weight:bold;}
```



```
body{  
color:red;  
font-family:Arial;  
font-weight:bold;  
}
```



Color Name	HEX	Color
AliceBlue	#F0F8FF	
AntiqueWhite	#FAEBD7	
Aqua	#00FFFF	
Aquamarine	#7FFFAD	
Azure	#F0FFFF	
Beige	#F5F5DC	
Bisque	#FFE4C4	
Black	#000000	
BlanchedAlmond	#FFEBCD	
Blue	#0000FF	
BlueViolet	#8A2BE2	
Brown	#A52A2A	
BurlyWood	#DEB887	
CadetBlue	#5F9EA0	
Chartreuse	#7FFF00	
Chocolate	#D2691E	



A large, dark gray, sans-serif letter 'A' is positioned on the left side of the image. It has a thick, solid stroke and a clean, geometric shape with no decorative elements.

Sans-Serif

A large, dark gray, serif letter 'A' is positioned on the right side of the image. It features a thick, solid stroke and includes traditional serif extensions at the top and bottom of the vertical stems.

Serif





peult. Si court a la damoisele si la co  
je a lifte si gnt iore q'ele sen merueille  
toute. & li dist. Damoisele. bien venistes  
cesta part. car onques pucele ne fist si gnt  
iore a mon seignor come vous li ferez. si  
tost com il voz en oura parler. & venes tost  
a lui. car il me tante tel face ces noueles.  
Los la morne ele mesme deuant le roi.  
Si li fet dire ce quelle li auoit come. Et  
qu' li rois lot. si est a metuelles lies. &  
dist ouant tous ses barons. Damoisele.  
vous manez fet si lies de ceste nouete que  
voz manez aperte. he ie ne vous en por  
voie mie dire la mortie. Si vous endoing  
en queredou de mes chasteaus celiu que  
mieu vos plera. Et ele len chev au pie.  
& len bese le sbuler. & li demande le chastel  
de lorc au noy. car nre en estoit. Et li rois  
li donne tout etramment.

Ors comence la iore & la feste p  
la vens. si gnt que len n'ouist  
dieu conant. Si lemons leus  
l'autre destre lies & ioreus. mes sie tous.  
& sor toutes en est la roine ioreuse & enuo  
ise. Si guerist de sa maladie & amende de  
tor en ior. & en belust. & en reuient en sa  
gnt beaute. que ele fust ondes bele. ele  
lest ore plus. Si le iene & rit o les chis. sie  
ele ne desire mes ne ne pense fors apeler  
dieu. quil gnt celiu de meschance. por  
qui ele a tant foffert maus. Mes a tant  
lesse ore li contes a parler de lui & del rois  
& retorne a mon seignor lancelot dou  
lac.

Il dist li contes que quant lan  
celot se fu parti de la blanche  
abeue. ou il ot la nuit ien. que  
il ot la damoisele emou a court. Si che  
nauta lies & iorans por les noueles tel m'a  
dot a la dame la roine. Car bien sainor  
que ele enseroit hec. Il demande a la velle  
ou ele le voudra mener. Si fet ele. ia ne  
le faures deuant que vous iloyes. Si enel  
fent a tout la parole.

Ant ont chenuac qual vindrent  
en vne prairie gnt & bele. Et il  
fedor gnt chaut. si com en tour  
la feste feut johan. Si ont iluches rois  
soz lombre de deus sacremes vne fontaine  
bele & cleve. ou il feut yn d'r. & n. damoi  
seles q' fesoient estendre vne blance nap  
sus leste vert. car il voloient mangier.  
Or il voient venir lancelot. si se lieuent  
contre lui. & dient. que bien soit il venus.  
Si le font destendre por mangier. Or il  
ot son haurme oste. & il ot lames les mias.  
il se fait. Et il ot en chaut. si fu vermed  
a desmeure. & fu de trop gnt beaute.  
Et por la gnt beaute de lui. le comenga  
a regnader vne des damoiselles qui estoit  
suur au d'r. Et estoit encore bone pucele.  
Et estoit si bele de coes & de facon. he en



```
body{  
    font-weight: normal;  
    font-size: 16px;  
    font-family: Arial, sans-serif;  
}
```

**Stacked rules in the declaration block.**



font: normal 16px "Arial", sans-serif;

font-weight: normal;

font-size: 16px;

font-family: Arial, sans-serif;



\*

Selects all elements.



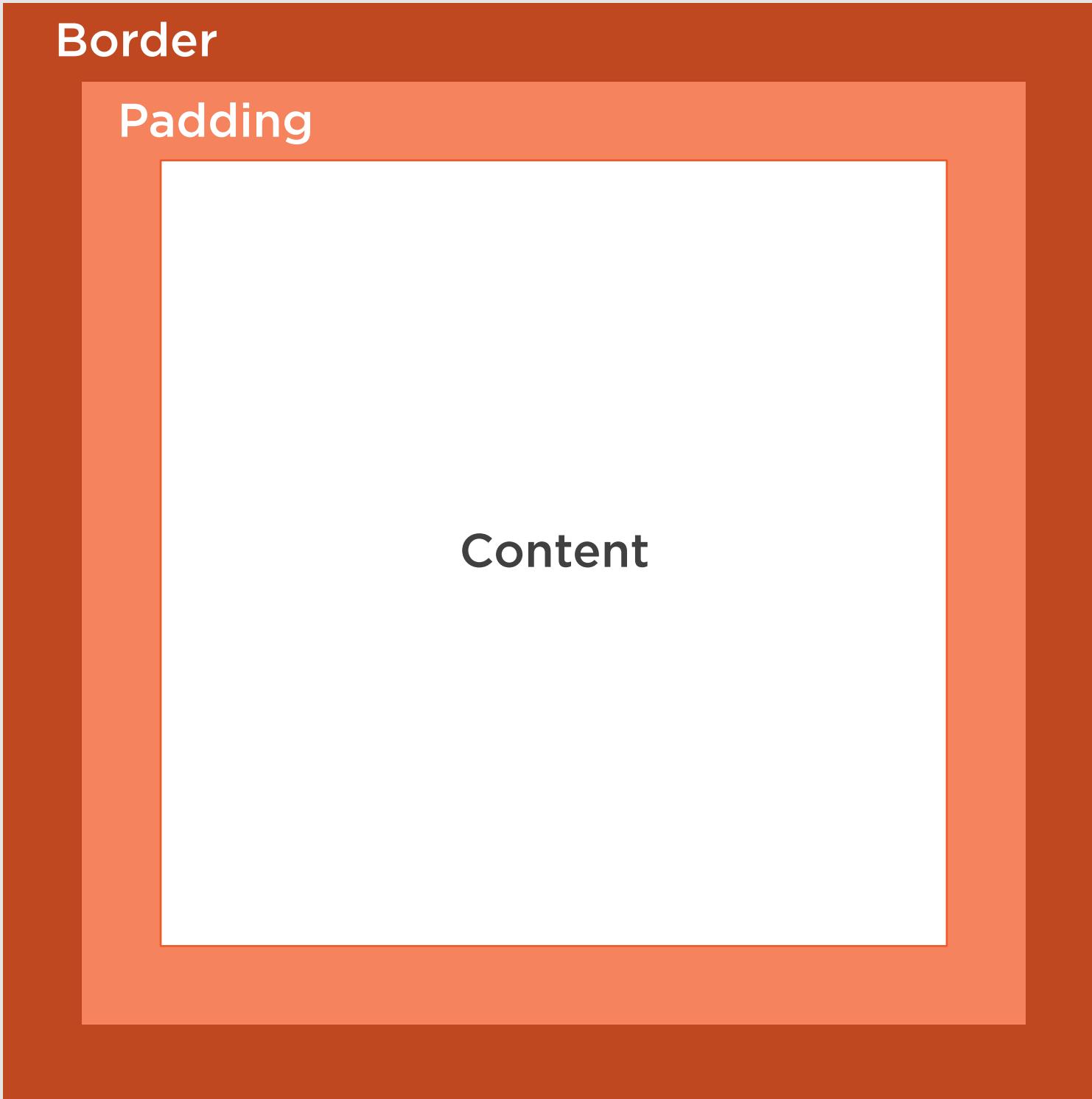
**Margin**

**Padding**

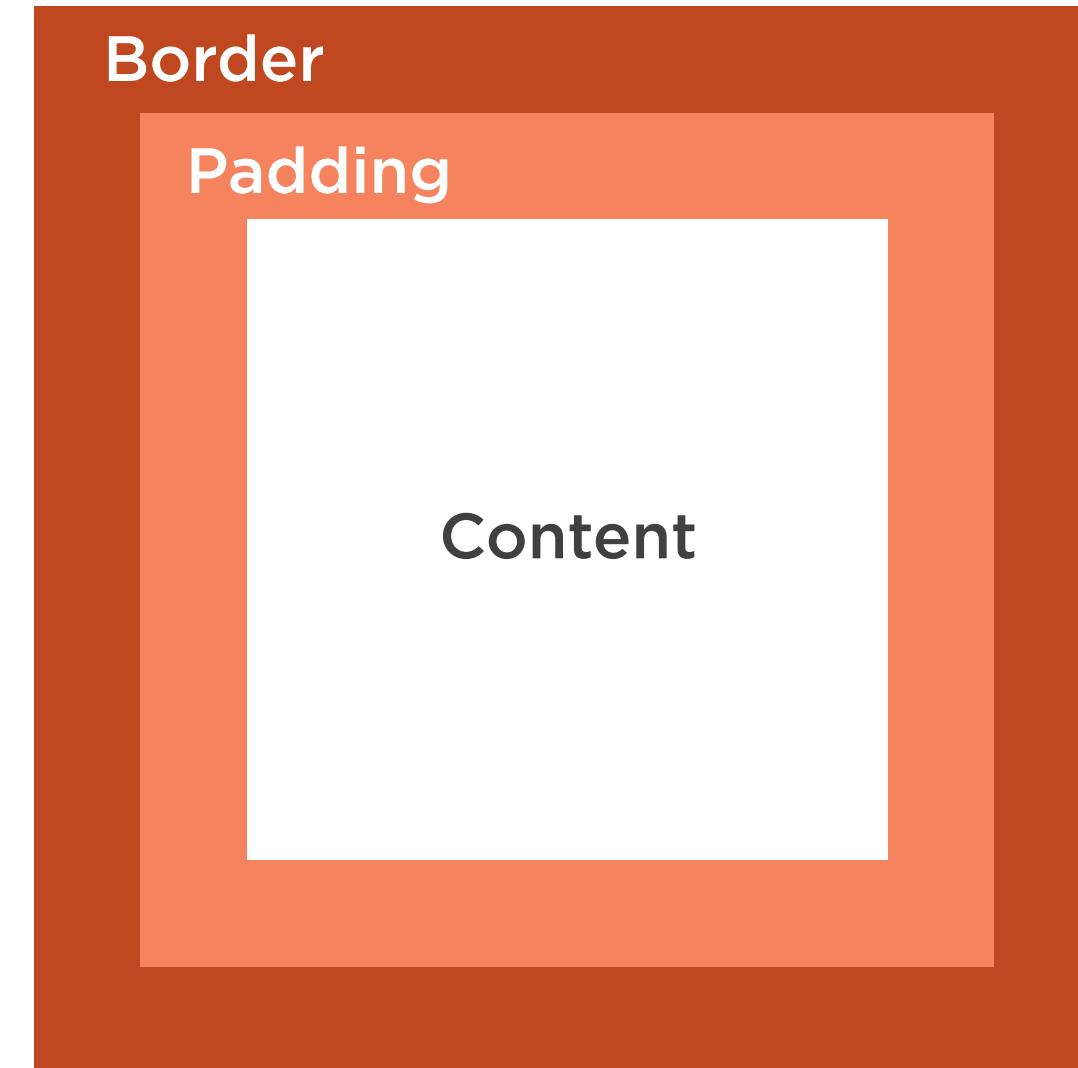
**Content**

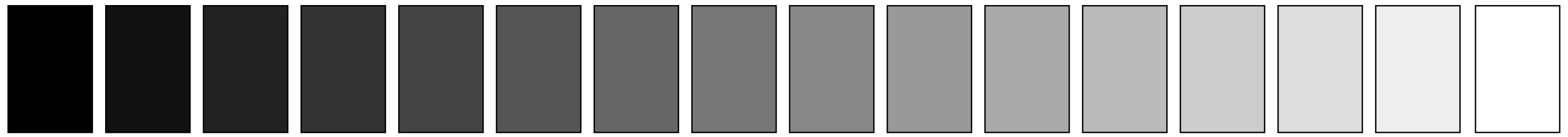


## Padding and Border on the outside



## Padding and Border on the inside





#000000 #111111 #222222 #333333 #444444 #555555 #666666 #777777 #888888 #999999 #AAAAAA #BBBBBB #CCCCCC #DDDDDD #EEEEEE #FFFFFF

#000 #111 #222 #333 #444 #555 #666 #777 #888 #999 #AAA #BBB #CCC #DDD #EEE #FFF

Shorthand hexadecimal values



`<header>` The header is a child of the body tag

`<nav>` The nav is a child of the header tag

`<ul>` The ul tag is a child of the nav tag

`<li><a href="#top">Top</a></li>` The li tag is a child of the ul tag

`<li><a href="#about">About</a></li>` The a tag is a child of the li tag

`<li><a href="#illus">Illustrations</a></li>`

`<li><a href="#read">Read</a></li>`

`<li><a href="#chapters">Chapters</a></li>`

`</ul>`

`</nav>`

`</header>`



# Pseudo

Not genuine; sham



# Pseudo Class

A pseudo class is a class that only appears in the css and is nowhere to be seen in the html.



# CSS Class

The class attribute specifies one or more classnames for an element. The class attribute is mostly used to point to a class in a style sheet.



## Wild Cats



## House Cats



```
body{color: red;}
```

```
h1{color:blue;}
```



**Striped Cats**



**Spotted Cats**



# Media Query

A Media query is a CSS technique introduced in CSS3. It uses the **@media** rule to include a block of CSS properties only if a certain condition is true.



# Alignment



# CSS Flexible Box or Flexbox

A CSS3 layout module to do multi-column layouts  
for responsive design.



# Z-Index

The z-index property specifies the stack order of an element. An element with greater stack order is always in front of an element with a lower stack order.



**-2 to infinity**

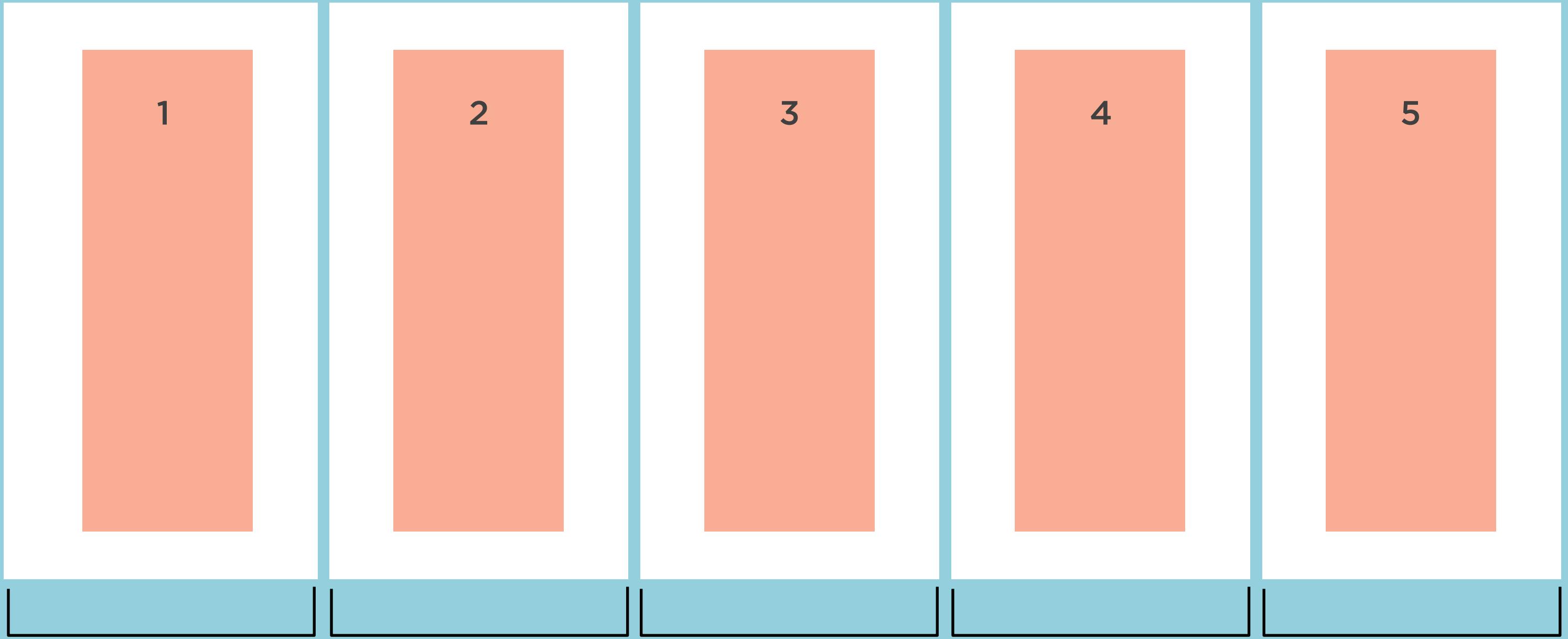
**-1**

**Default - Level 0**

**+1**

**+2 to infinity**





Space Around

Space Around

Space Around

Space Around

Space Around



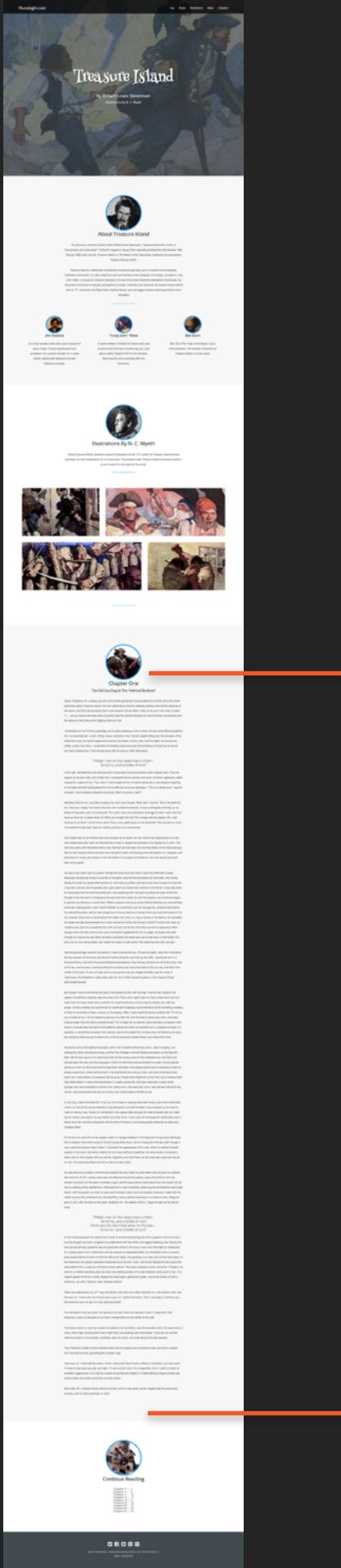
# CSS Descendant Selector

The descendant combinator – typically represented by a single space character – combines two selectors such that elements matched by the second selector are selected if they have an ancestor element matching the first selector.



```
<html>  
  <body> The body is a child of the html tag  
    <section> The section is a child of the body tag  
      <p> lorem ipsum </p> The paragraph is a child of the section tag  
    </section>  
  </body>  
</html>
```





Target paragraphs in this section



12



```
<section id="illus" class="illustrations">



<h3>Illustrations by N.C. Wyeth</h3>

<ul class="grid">

<li class="small" style="background-image: url(images/one-last-tremendous-cut.jpg)" alt=""></li>

<li class="large" style="background-image: url(images/cover-illustration.jpg)" alt=""></li>

<li class="small" style="background-image: url(images/the-boarders-swarmed-over-the-fence-like-monkeys.jpg)" alt=""></li>

<li class="large" style="background-image: url(images/deadly-wrestle.jpg)" alt=""></li>

</ul>

<hr>

</section>
```



# Background-Clip

The background-clip property decides the size of the painting area of the background in the parent div.



# Content-Box

The content-box value means the background is clipped to the content box.



# VH Unit

The VH unit is a relative measurement set to 1% of the height of the device's viewport.



# Summary



We linked up the HTML page to a cascading style sheet

```
4 <title>chapter one - treasure island</title>
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <link rel="icon" type="image/png" href="images/favicon.png">
8 <meta charset="utf-8">
9 <link rel="stylesheet" href="styles.css">
0 </head>
1 <body id="top">
2 <header>
3   <h2><a href="http://www.pluralsight.com" target="_blank">Pluralsight.com</a></h2>
4 <nav>
5   <ul>
6     <li><a href="#top">Top</a></li>
7     <li><a href="#about">About</a></li>
8     <li><a href="#illus">Illustrations</a></li>
9     <li><a href="#read">Read</a></li>
0     <li><a href="#chapters">Chapters</a></li>
1   </ul>
2 
3 </nav>
4 </header>
```



# Summary



We dived into CSS rule making

The screenshot shows the Brackets code editor interface. The title bar reads "Window Debug Help" and "• styles.css (treasure-island) — Brackets". The code editor displays the following CSS code:

```
1 *{  
2     margin:0;  
3     padding:0;  
4 }  
5  
6  
7 ul, nav{  
8     list-style: none;  
9 }  
10  
11  
12 body{  
13     font: normal 16px "Arial", sans-serif;  
14     color:#555;  
15 }
```



# Summary



We saw the styles come to life in real time.

The screenshot shows the Brackets IDE interface. On the left is a browser window titled "Chapter One - Treasure Island" displaying the content of "chapter\_one.html". The page includes a header with "Pluralsight.com", a title "Treasure Island" by Robert Louis Stevenson, and a portrait of N.C. Wyeth. Below the portrait is a section titled "About Treasure Island" with a detailed description of the novel. On the right is the code editor with two tabs: "chapter\_one.html" and "styles.css (treasure-island) — Brackets". The "chapter\_one.html" tab shows the HTML structure, and the "styles.css" tab shows the CSS code. The CSS code defines styles for the entire document, including a font of "normal 16px 'Arial', sans-serif" and a color of "#555" for all elements, and specific styles for links (a) such as "text-decoration: none", "color: inherit", "cursor: pointer", and "opacity: 0.9" for the normal state, and "opacity: 1" for the hover state. The status bar at the bottom indicates "Line 15, Column 15 — 27 Lines".

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4  <title>Chapter One - Treasure Island</title>
5  <meta http-equiv="X-UA-Compatible" content="IE=edge" />
6  <meta name="viewport" content="width=device-width, initial-scale=1">
7  <link rel="icon" type="image/png" href="images/favicon.png">
8  <meta charset="utf-8">
9  <link rel="stylesheet" href="styles.css" />
10 </head>
11 <body id="top">
12 <header>
13   
14   font: normal 16px "Arial", sans-serif;
15   color: #555;
16 }
17
18 &lt;a&gt;
19   text-decoration: none;
20   color: inherit;
21   cursor: pointer;
22   opacity: 0.9;
23 &lt;/a&gt;
24
25 &lt;a :hover&gt;
26   opacity: 1;
27 &lt;/a&gt;
```



# Summary



We learned how to matte images  
into a circular border

Top  
About  
Illustrations  
Read  
Chapters

**Treasure Island**  
by Robert Louis Stevenson  
illustrations by N.C. Wyeth



**About Treasure Island**  
An adventure novel by Scottish author Robert Louis Stevenson, *Treasure Island* tells a story of "buccaneers and buried gold". Children's magazine Young Folks originally serialized the tale between 1881 through 1882 under the title Treasure Island, or The Mutiny of the Hispaniola, credited to the pseudonym "Captain George North". *Treasure Island* is traditionally considered a coming-of-age story, and is noted for its atmosphere, characters, and action. It is also noted as a wry commentary on the ambiguity of morality— as seen in Long John Silver — unusual for children's literature. It is one of the most frequently dramatized of all novels. Its influence is

```
22      </nav>
23  </header>
24  <section id="head">
25    <h1>Treasure
26      <h3>by Robe
27          illus
28      </h3>
29  </section>
30  <section id="abou
31    
```

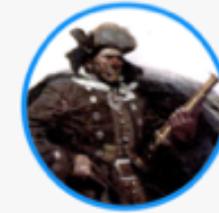
```
18  a{
19    text-decorat
20    color:inherit
21    cursor:pointe
22    opacity: 0.5
23  }
24  a:hover{
25    opacity: 1
26  }
27  .round{
28    border: 6px s
29    border-radius:
30  }
```



# Summary



We stylized each and every section on the page the way the web designer imagined it.



Chapter One

The Old Sea-Dog At The "Admiral Benbow"

Squire Trelawney, Dr. Livesey, and the rest of these gentlemen having asked me to write down the whole particulars about Treasure Island, from the beginning to the end, keeping nothing back but the bearings of the island, and that only because there is still treasure not yet lifted, I take up my pen in the year of grace 17... and go back to the time when my father kept the Admiral Benbow inn and the brown old seaman with the sabre cut first took up his lodging under our roof.

I remember him as if it were yesterday, as he came plodding to the inn door, his sea-chest following behind him in a hand-barrow—a tall, strong, heavy, nut-brown man, his tarry pigtail falling over the shoulder of his soiled blue coat, his hands ragged and scarred, with black, broken nails, and the saber cut across one cheek, a dirty, livid white. I remember him looking round the cover and whistling to himself as he did so, and then breaking out in that old sea-song that he sang so often afterwards:

"Fifteen men on the dead man's chest—  
Yo-ho-ho, and a bottle of rum!"

in the high, old tottering voice that seemed to have been tuned and broken at the capstan bars. Then he rapped on the door with a bit of stick like a handspike that he carried, and when my father appeared, called roughly for a glass of rum. This, when it was brought to him, he drank slowly, like a connoisseur, lingering



# Summary



We stylized all horizontal rules with  
a few lines of code

The screenshot shows a web page with a sidebar on the right containing a portion of a CSS file. The main content area displays the text of the 'About Treasure Island' section from the novel. The sidebar shows the following CSS code:

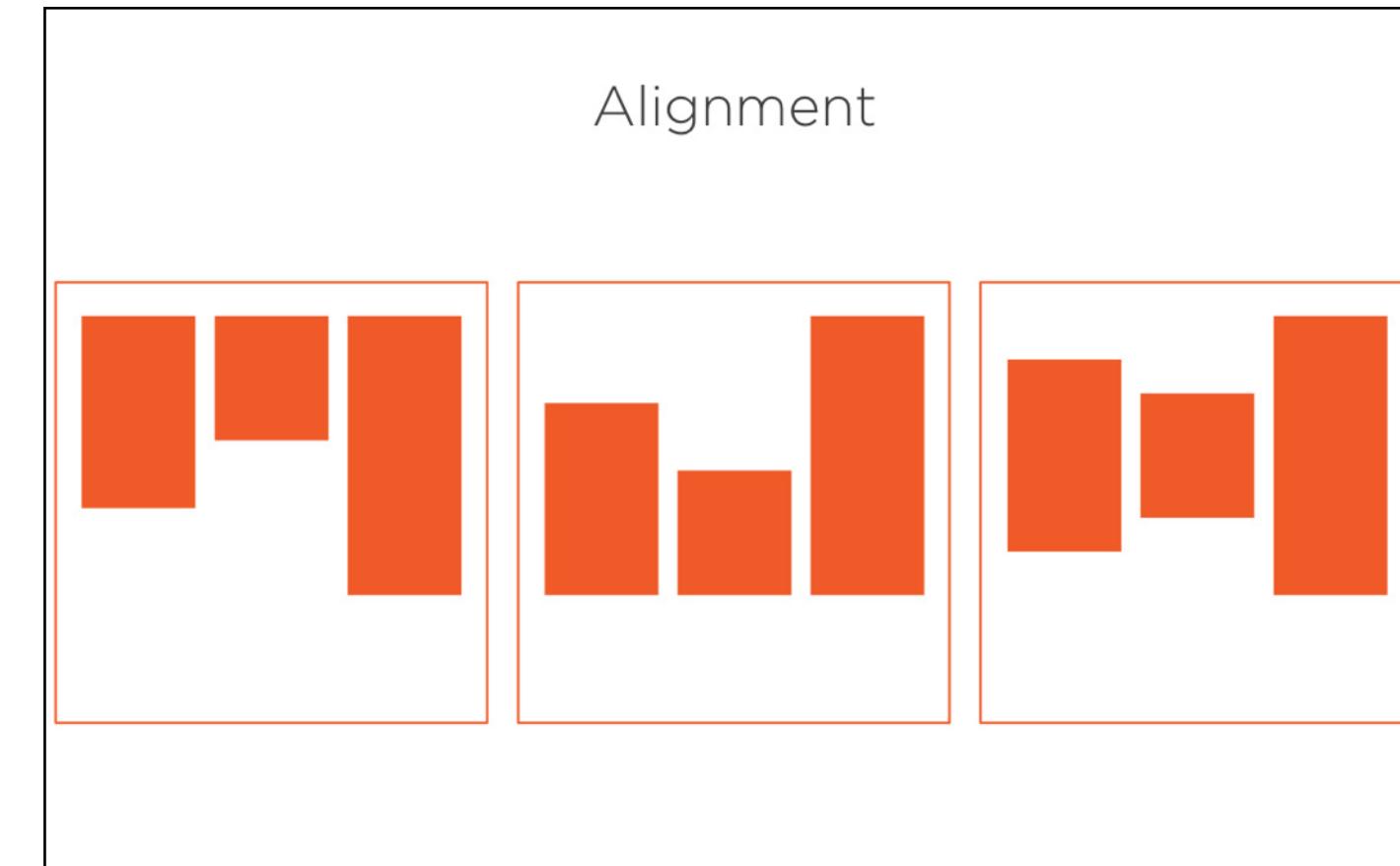
```
initial
7 <link href="https://www.w3schools.com/html/html_css.asp" rel="stylesheet">
8 <meta name="viewport" content="width=device-width, initial-scale=1.0">
9 <link href="https://www.w3schools.com/html/html_css.asp" rel="stylesheet">
10 </head>
11 <body>
12 <header>
13 <h1>About Treasure Island
14 <img alt="Treasure Island book cover" data-bbox="488 378 658 408"/>
15 <div data-bbox="521 421 751 551">
16   An adventure novel by Scottish author Robert Louis Stevenson, Treasure Island tells a story of "buccaneers and buried gold". Children's magazine Young Folks originally serialized the tale between 1881 through 1882 under the title Treasure Island, or The Mutiny of the Hispaniola, credited to the pseudonym "Captain George North".
17 </div>
18 <div data-bbox="521 588 751 788">
19   Treasure Island is traditionally considered a coming-of-age story, and is noted for its atmosphere, characters, and action. It is also noted as a wry commentary on the ambiguity of morality— as seen in Long John Silver — unusual for children's literature. It is one of the most frequently dramatized of all novels. Its influence is enormous on popular perceptions of pirates, including such elements as treasure maps marked with an "X", schooners, the Black Spot, tropical islands, and one-legged seamen bearing parrots on their shoulders.
20 </div>
21 <hr data-bbox="601 828 681 831"/>
22 <hr data-bbox="601 838 681 841"/>
23 <hr data-bbox="601 848 681 851"/>
24 <hr data-bbox="601 858 681 861"/>
25 <hr data-bbox="601 868 681 871"/>
26 <hr data-bbox="601 878 681 881"/>
27 <hr data-bbox="601 888 681 891"/>
28 <hr data-bbox="601 898 681 901"/>
29 <hr data-bbox="601 908 681 911"/>
30 <hr data-bbox="601 918 681 921"/>
31 <hr data-bbox="601 928 681 931"/>
32 <hr data-bbox="601 938 681 941"/>
33 <hr data-bbox="601 948 681 951"/>
34 <hr data-bbox="601 958 681 961"/>
35 <hr data-bbox="601 968 681 971"/>
36 <hr data-bbox="601 978 681 981"/>
37 <hr data-bbox="601 988 681 991"/>
38 <hr data-bbox="601 998 681 1001"/>
39 <hr data-bbox="601 1008 681 1011"/>
40 <hr data-bbox="601 1018 681 1021"/>
41 <hr data-bbox="601 1028 681 1031"/>
42 <hr data-bbox="601 1038 681 1041"/>
43 <hr data-bbox="601 1048 681 1051"/>
44 <hr data-bbox="601 1058 681 1061"/>
45 <hr data-bbox="601 1068 681 1071"/>
46 <hr data-bbox="601 1078 681 1081"/>
47 <hr data-bbox="601 1088 681 1091"/>
48 <hr data-bbox="601 1098 681 1101"/>
49 <hr data-bbox="601 1108 681 1111"/>
50 <hr data-bbox="601 1118 681 1121"/>
51 <hr data-bbox="601 1128 681 1131"/>
52 <hr data-bbox="601 1138 681 1141"/>
53 <hr data-bbox="601 1148 681 1151"/>
54 <hr data-bbox="601 1158 681 1161"/>
```



# Summary



We introduced the CSS layout mode known as **flexible box** or **flexbox**



# Summary



We turned illustrations and text into  
multicolumn layouts



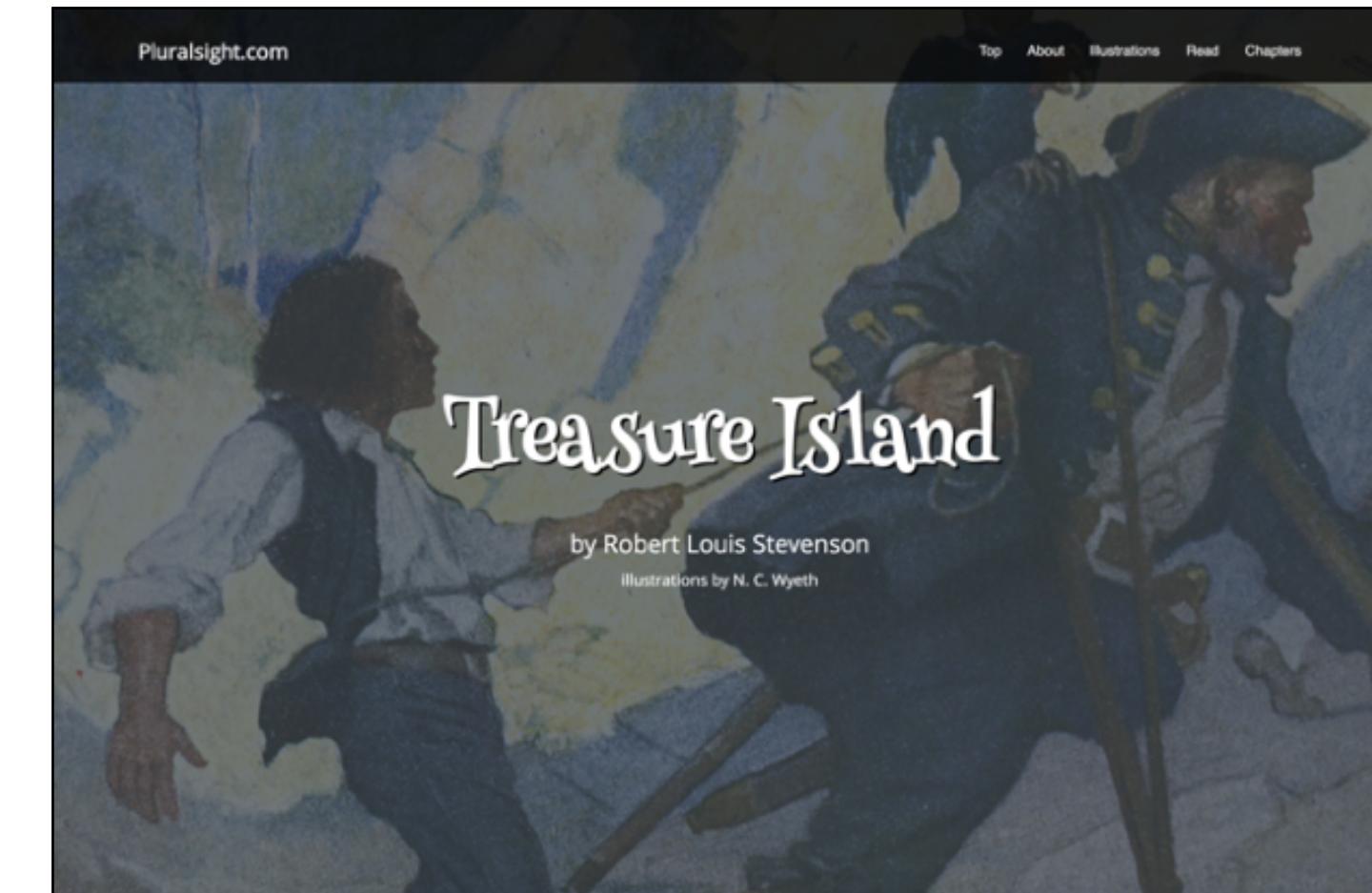
Illustrations By N.C. Wyeth



# Summary



We created a cool header background



# Summary



We restyled the illustrations so they are responsive

```
ts File Edit Find View Navigate Emmet Window Debug Help
Chapter One - Treasure Island ×
127.0.0.1:62442/chapter_one.html
Pluralsight.com
Top About Illustrations Read Chapters



# Treasure Island



By Robert Louis Stevenson  
Illustrations By N.C. Wyeth



---



```

chapter_one.html
island,&rdquo; and a reformed pirate. He has been marooned on Treasure Island for three years.</p>
52   </li>
53   </ul>
54   <hr>
55   </section>
56   <section id="illus">
57     
58     <h3>Illustrations by N.C. Wyeth</h3>
59     <ul>
60       <li></li>
61       <li></li>
62       <li></li>
63       <li></li>
64     </ul>
65     <hr>
66   </section>
67   <section id="read">
68     

```


```

